

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P O Box 1450 Alexandria, Virgiria 22313-1450 www.uspio.gov

PAPER

10/30/2008

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 09/966,004 09/28/2001 Arnold Jeffery Daks AUS9-2001-0767-US1 4835 10/30/2008 EXAMINER Leslie A. Van Leeuwen International Business Machines Corporation KISS, ERIC B Intellectual Property Law Dept., Internal Zip 4054 ART UNIT PAPER NUMBER 11400 Burnet Road Austin, TX 78758 MAIL DATE DELIVERY MODE

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.usplo.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/966,004 Filing Date: September 28, 2001 Appellant(s): DAKS ET AL.

> J. B. Kraft (Reg. No. 19,226) For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed August 4, 2008, appealing from the Office action mailed January 7, 2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

Appellants filed two responses after the final rejection: (i) an erroneous submission of a reply brief from another application on April 7, 2008 (see Transmittal Letter for Corrected Appeal Brief, August 4, 2008 (acknowledging the erroneous submission)); and (ii) an amendment to claims 32-41 on May 29, 2008. Appellant correctly states that the examiner has not previously indicated whether the amendment filed May 29, 2008, would be entered (Brief, August 4, 2008, p. 3).

The amendment after final rejection filed on May 29, 2008 is <u>entered</u> with this Examiner's Answer.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

Art Unit: 2192

(6) Grounds of Rejection to be Reviewed on Appeal

The appellants' statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner.

The rejection of claims 32-41 under 35 U.S.C. § 112, second paragraph, is withdrawn.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Tim Pyron, "Using Microsoft® Project 98 Special Edition," 1997, Que Corp., pp. 18-19,

125-126, 140, 154-156, 311-312, 473, 484-489, 565-566, 661-662¹.

5,949,999 SONG et al. 9-1999 6,223,343 HOPWOOD et al. 4-2001

¹ In the Final Rejection, this reference is cited as "Using Microsoft Project 2000" in the heading of the rejection of claims 1-6, 8-13, 22-27, 32-37, and 39-41. However, despite this typographical error, appellants have correctly understood this citation to refer to the "Using Microsoft Project 98 Special Edition" document.

Application/Control Number: 09/966,004 Page 4

Art Unit: 2192

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

9.1. Claims 1-6, 8-13, 22-27, 32-37, and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over ["Using Microsoft® Project 98 Special Edition"] (hereinafter "Project") in view of Song et al., US5,949,999 (hereinafter Song).

In regard to claim 1, Project discloses:

- "A computer controlled display system for tracking the development of ... products..." (E.g., see pages 565-566, "Using Microsoft project in workgroups" & Figure 18.1), wherein an example software development product having a plurality of developmental lines (components being developed) is illustrated.
- "...means for setting in each of said plurality of developmental lines, a sequence of checkpoints..." (E.g., see page 661, "The Gantt Chart" & page 662, Figure 20.2 & page 140, "Entering Milestones" & page 19, fifth paragraph), wherein milestones, or interim goals, which mark the completion of a particular tasks included in a project. Milestones serve as check points by which a project can be gauged. The gantt chart is a means to track the project.
- "...means for tracking each of said developmental lines to determine the reached checkpoints; and means for simultaneously displaying said plurality of developmental lines and indicating said reached checkpoints." (E.g., see Figure 15.14 + 15.15 & pages 488-489), wherein progress bars and/or progress marks indicate tasks that have been started, the percent complete

and/or started or complete to track the reality of the project, wherein the plurality of tasks (development lines) are displayed simultaneously.

But **Project** does not expressly disclose "...complex software products... having a plurality of developmental lines.". However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use Microsoft Project for complex software projects comprising a plurality of developmental lines. The motivation to do so was provided by **Project's** teaching (E.g., see Figure 5.1 & pages 125-126), wherein organizing a project activity or task list into phases is disclosed.

However, Song teaches ((E.g., see Figure 3 & Column 3, lines 57-58), wherein a user defines procedures (checkpoints) to be performed during the project execution, wherein the particular system component would correspond to a respective developmental line as illustrated in Figure 3. As shown in Figure 2 and Figure 3, Song lists or displays a plurality of components or developmental lines (Patient and File Functions, Measurement, Imaging, Filming, System Functions, General Servers and Tools, etc...). Project and Song are analogous art because they are both concerned with the same field of endeavor, namely, managing/tracking the development of a software product. Therefore, it would have been obvious to one of ordinary skill in the art, to use Microsoft Project to develop a software product with a plurality of developmental lines.

In regard to claim 2, the rejections of base claim 1 are incorporated. Furthermore, Project discloses:

> "...means for modifying said developmental lines and said checkpoints; and means for displaying said modifications ..." (E.g., see pages 484-489,
> "Viewing the tracking Gantt chart", particularly page 486, "Tracking Actual

Performance and Costs"), wherein revising the progress line duration and changing task relationships are disclosed.

In regard to claim 3, the rejections of base claim 3 are incorporated. Furthermore,

Project discloses:

"...displaying at each of said checkpoints, a set of developmental attributes for said checkpoint." (E.g., see pages 154-156, "Using the Task Details View" & Figure 5.32), wherein each milestone which is a task, can display a list of details associated with the task including subtasks, predecessor tasks and successor tasks as illustrated in the sequence of development by the task timeline.

In regard to claim 4, the rejections of base claim 3 are incorporated. Furthermore, Project discloses:

> "...means for modifying said developmental attributes for each of said checkpoints; and means for displaying said modifications at each of said checkpoints." (E.g., see page 156, "Inserting, Clearing, and Deleting Tasks"), wherein a subtask, predecessor or successor task may be entered or deleted.

In regard to claim 5, the rejections of base claim 3 are incorporated. Furthermore,

Project discloses:

"...said developmental attributes include actions performed in said software
product development." (E.g., see pages 154-156, "Using the Task Details
View" & Figure 5.32), wherein subtasks, predecessor tasks and successor
tasks actions performed in said product development.

Art Unit: 2192

In regard to claim 6, the rejections of base claim 2 are incorporated. Furthermore,

Project discloses modifying or switching actions among tasks (e.g., see page 156, "Editing the

Task List") wherein, editing or rearranging the task list is disclosed. Furthermore, Project

teaches resolving resource allocation (e.g., see page 473, "Tracking work on the project")

wherein the resources may be people (see pages 311-312, "Assigning resources to Tasks").

Thus, it would have been obvious to one of ordinary skill in the art, at the time the invention was

made to reallocate resources (add activities or tasks to a developers project) to find ways to

reduce costs (e.g., see page 486, "Tracking Actual Performance and Costs") during development

of software.

In regard to claim 22, Project discloses the limitations as addressed in regard to claim 1 above. But, Project does not expressly disclose "...a functional implementation stage to a complete integrated program product...": However, Song discloses:

"A computer controlled display system for tracking the building of a program product from a functional implementation stage to a complete integrated program product..." (E.g., see Figure 3 & Column 1, lines 37-41), wherein a display which guides tracking of software development documents or products having a plurality of developmental lines is disclosed. Furthermore, Figure 3 illustrates the status of Implementation and Integration phases.

As per claims 8-13 and 25, this is a method version of the claimed system discussed above, in claims 1-6 and 22, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see Song (Column 7, lines 31-33), wherein a method of the above system is disclosed.

Art Unit: 2192

In regard to claim 23, the rejections of base claim 22 are incorporated. But Project does not expressly disclose "related to the compatibility functions of said checkpoint line". However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to include attributes that are related to the compatibility functions of said checkpoint line. The motivation to do so was suggested by Song (E.g. see, Figure 3 & Column 1, lines 37-45), wherein Song discloses "the present invention is a mechanism that integrates software engineering and system components to guide the browsing/tracking of software development documents (e.g.,...testing) ...this capability is useful...for developing and validating safety-critical software systems". It would have been obvious, to one of ordinary skill, at the time the invention was made, to include compatibility functions in the testing. Furthermore, Song discloses, "testing" in Figure 3. Therefore, it would have been obvious to include attributes "related to the compatibility functions of said checkpoint line. See claim 3 for the remaining limitations.

In regard to claim 24, see the rejections of base claim 22 and 3.

As per claims 26 and 27, this is a method version of the claimed system discussed above, in claims 6 and 23, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see Song (Column 7, lines 31-33), wherein a method of the above system is disclosed.

As per claims 32-37 and 39-41, this is a computer program version of the claimed system discussed above, in claims 1-6 and 22-24, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see Song (Figure 4 & Column 5, lines 51-52), wherein loading the project file into program memory for use is disclosed.

9.2 Claims 7, 14, 31, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Project in view of Song and further in view of Hopwood et al., US 6,223,343 B1 (hereinafter Hopwood).

In regard to claim 7, the rejections of base claim 2 are incorporated. But **Project** does not expressly disclose, "said means for tracking are remote from said means for displaying". However, **Hopwood** discloses:

- "...means for storing, in association with said means for displaying, the data tracked by said means for tracking; and means for communicating the data tracked to said means for storing." (E.g., see Figure 6 (element 100, 106) & Column 15, lines 42-46), wherein the document repository (store) stores the data tracked in association with displaying, wherein the data is retrieved from the document repository.
- "...said means for tracking are remote from said means for displaying..."
 (E.g., see Figure 6 & Column 15, lines 22-31), wherein the RMS (means for tracking) is remote from the means for displaying.

Project, Song and Hopwood are analogous art because they are both concerned with the same field of endeavor, namely, managing/tracking the development of a software product.

Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine Hopwoods' remote means for tracking with Projects' software tracking system. The motivation was provided by Song in developing a tracking mechanism "for any organization that produces safety-critical software system". Therefore, it

Art Unit: 2192

would be obvious, to one of ordinary skill in the art, to access the system remotely as many organizations have developers and managers in remote locations. Thus it would have been obvious to combine **Hopwoods'** remote means for tracking with **Songs'** software tracking system.

As per claim 14, this is a method version of the claimed system discussed above, in claim 7, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see Song (Column 7, lines 31-33), wherein a method of the above system is disclosed.

As per claim 38, this is a computer program version of the claimed system discussed above, in claim 7, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see Project (Figure 4 & Column 5, lines 51-52), wherein loading the project file into program memory for use is disclosed.

As per claim 31, this is a method version of the claimed method discussed above, in claims 8-14, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see Song (Column 7, lines 31-33), wherein a method of the above system is disclosed

(10) Response to Argument

Appellants' arguments are reproduced nearly verbatim from the reply filed July 28, 2007 (Remarks, July 28, 2007, pp. 11-17), and have already been addressed in the Final Rejection (Final Rejection at 2-4). Thus, the response below is largely repeated from the Final Rejection.

A. The rejection of claims 1-6, 8-13, 22-27, 32-37, and 39-41 under 35 U.S.C. § 103(a) Regarding appellants' allegation that the volume of pages in the *Project* reference

somehow suggests that the examiner must have relied on impermissible hindsight in rejecting the

claims (Brief 18-19), the examiner again submits that everything disclosed in the *Project* reference pertains to features found in a single software product, namely the Microsoft® Project 98 software product. Thus, the elements of the *Project* reference relied upon were <u>not</u> combined based on applicant's own teachings through impermissible hindsight as applicant alleges (*Id.*) but were instead already combined (by Microsoft Corporation) prior to applicant's filing date. As noted in the Final Rejection, appellants' admission that, "there are probably enough tools and routines disclosed in the cited over 600 page Project text through the use of which the system of the invention could be built," (*Id.*) is itself an apparent concession that the claimed invention would have been obvious in view of the Microsoft Project 98 software product described in the *Project* reference.

Project discloses entering and displaying milestones (e.g., in a Gantt chart (see, e.g., page 661, "The Gantt Chart" & page 662, Figure 20.2 & page 140, "Entering Milestones" & page 19, fifth paragraph)). As noted in the previous Office action, these milestones mark the completion of particular tasks included in a project and thus, serve a checkpoints in developmental lines, wherein milestones, or interim goals, which mark the completion of a particular tasks included in a project. Milestones serve as check points by which a project can be gauged. The Gantt chart is a means to track the project, including its individual tasks.

The additional cited teachings of *Project* (pp. 125-126) show that it has been known to break up large projects into separate phases of functional groups, which form tasks that are individually managed as part of overall project management (the Work Breakdown Structure traditionally used by project managers). These separate tasks and associated resources may be

Art Unit: 2192

considered developmental lines. On p. 565, *Project* further discloses managing projects involving many planners and many resources who do the work of the project.

Project further describes simultaneous display of multiple tasks in the Gantt chart and displaying multiple milestones (see, e.g., p. 140 (describing display of milestones) and pp. 661-662 (the Gantt chart as a display of multiple tasks)).

Project further describes several ways to simultaneously view and edit task information. For example, p. 154 shows a Task Details view in a split-window display along with the Gantt chart. Further, on p. 156, Project discloses that changes made in one view are automatically reflected in all other views (explicitly referencing both the Gantt Chart view and the Task Entry view). The individual tasks displayed in the multiple views of Project may be assigned to selected resources, and the resource assignment may be later changed, which further affects the display of task information (as described, for example, on p. 312 in the description of the Task Usage view), thus switching actions from one developmental line to another (reassigning resources) in the simultaneously display of a plurality of developmental lines.

The cited teachings of SONG et al. are largely cumulative to the evidence contained in Project. SONG et al. is cited as additionally teaching defining checkpoints in a system comprising multiple developmental lines as illustrated, for example, in Figs. 2 and 3. Further, SONG et al. teaches the simultaneous display of multiple developmental lines. See, e.g., col. 4, lines 56-65 (describing how <u>each</u> column in the progress status panel of Figure 3 shows the status of the document within <u>one</u> development phase).

Art Unit: 2192

B. The rejection of claims 7, 14, 31, and 38 under 35 U.S.C. § 103(a) (Brief at 23).

Project further describes Internet features which enable project managers to manage a project with resources located almost anywhere in the world (*Project* p. 565), thus providing remote tracking and communication to the project manager (and the Project display).

Further, *Hopwood* is cited as additionally teaching a data tracking and management system in which a centralized repository (RMS repository 100) is used to store tracked data, and developers and other users display and manipulate the data through remote workstations (e.g., Fig. 6; col. 15, lines 20-46). In simplest terms, if the system of *Hopwood* as characterized by appellants (Brief at 23) did not communicate the tracked data to the display system and store it there (e.g., in RAM or in a buffer), it would be impossible to subsequently display it.

C. The rejection of claims 32-41 under 35 U.S.C. § 112, second paragraph.

As noted above in section 6, the rejection of claims 32-41 under 35 U.S.C. § 112, second paragraph, has been withdrawn.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer. Art Unit: 2192

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Eric B. Kiss/ Eric B. Kiss Primary Examiner, Art Unit 2192

Conferees:

/Tuan Q. Dam/ Tuan Q. Dam Supervisory Patent Examiner, Art Unit 2192

/Lewis A. Bullock, Jr./ Lewis A. Bullock, Jr. Supervisory Patent Examiner, Art Unit 2193